

TYPHOON ANDY

BEST TRACK TC-18W

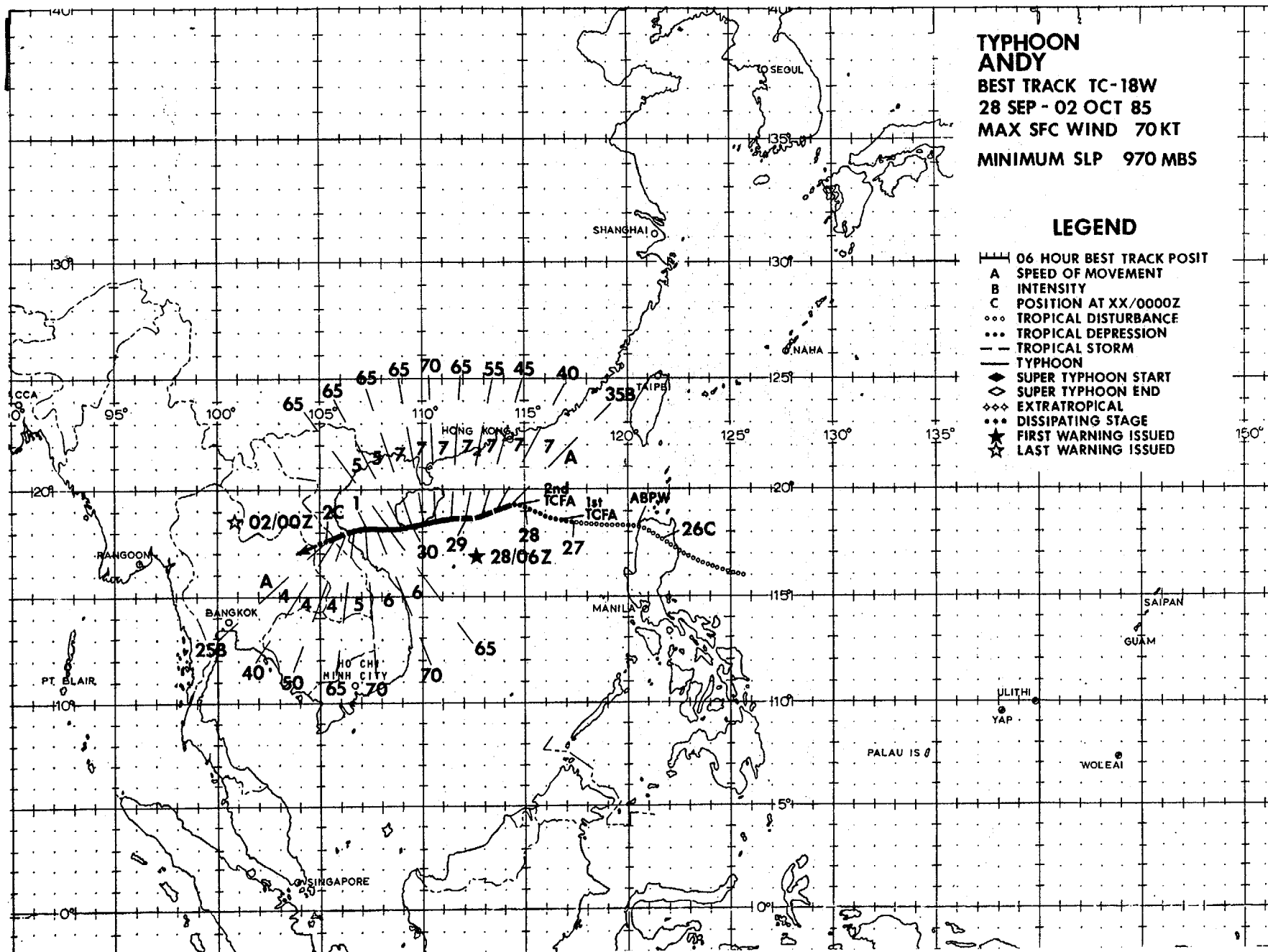
28 SEP - 02 OCT 85

MAX SFC WIND 70 KT

MINIMUM SLP 970 MBS

LEGEND

- 06 HOUR BEST TRACK POSIT
- A SPEED OF MOVEMENT
- B INTENSITY
- C POSITION AT XX/0000Z
- ... TROPICAL DISTURBANCE
- ... TROPICAL DEPRESSION
- TROPICAL STORM
- TYPHOON
- ◆ SUPER TYPHOON START
- ◇ SUPER TYPHOON END
- ◆◆ EXTRATROPICAL
- ... DISSIPATING STAGE
- ★ FIRST WARNING ISSUED
- ★ LAST WARNING ISSUED



TYPHOON ANDY (18W)

Typhoon Andy was a relatively short-lived tropical cyclone. Developing in the South China Sea, Andy transited uneventfully to the west-south-west. Although the cyclone made landfall twice at or near typhoon strength, there were no reports of serious damage or injuries.

The disturbance that eventually developed into Typhoon Andy was first detected late on 25 September as a small area of intense convection in the monsoon trough east of the Philippines. This compact CDO feature was part of a larger area of disturbed weather which had persisted east of Mindanao for several days. The southern portion of this large area had been the subject of a TCFA on the 24th and 25th. When the area of convection moved northwest across northern Luzon early on the 26th and entered the South China Sea, development of Andy began in earnest.

Between 260000Z and 270000Z the tropical disturbance moved to the west-northwest and slowly consolidated. Coincidentally, an early season surge in the northeast monsoon was underway generating 25 to 40 kt (13 to 21 m/s) winds across the Taiwan Straits and the northern South China Sea. This surge most probably contributed to the excess low-level cyclonic vorticity needed to produce a lee-side circulation off the northwest coast of Luzon. The development of this low-level vortex is thought to have aided the development of Andy. At 270000Z, Dvorak intensity analysis of the cloud system estimated 30 kt (15 m/s) surface winds were present. Sparse supporting synoptic data at that time showed only 20 to 25 kt (10 to 13 m/s) surface winds near the disturbance's center. However, due to the improved organization and the expectation for further development, a TCFA was issued at 270300Z. Less than three hours later, satellite imagery revealed the presence of a partially exposed low-level circulation center.

Over the next 24 hours, the system continued to move to the west-northwest in the monsoon trough. Despite the presence of the low-level circulation center on satellite imagery on the 27th, aircraft reconnaissance early on the 28th was unable to find a surface circulation. But, because winds of 25 to 30 kt (13 to 15 m/s) and a 1001 mb MSLP were observed, the TCFA was reissued at 280300Z.

The first warning on Andy, as Tropical Depression 18W, followed several hours later at 280600Z. By that time it had become apparent the system was more than just a benign circulation in the monsoon trough. Dvorak intensity analyses by two different tactical DMSP sites estimated the intensity at 30 and 45 kt (15 m/s and 23 m/s). As Tropical Depression 18W matured, it came under the influence of low- to mid-level ridging to the north. The Tropical Cyclone responded by turning to the west-southwest. It moved in this direction for the remainder of its lifetime.

Continuing to intensify, Andy attained typhoon strength about 24 hours after the first warning, at 290600Z. At that time, the Dvorak intensity analysis was a T4.0, supporting 65 kt (33 m/s) surface winds. Andy's intensification to a typhoon coincided with the formation of a small ragged eye. Typhoon Andy first made landfall on the southern tip of Hainan Island just east of Yai-Xian (WMO 59948) at 291800Z with maximum sustained winds of 65 kt (33 m/s), gusts to 80 kt (41 m/s). After a glancing blow to Hainan (Figure 3-18-1), Andy continued west-southwestward across the southern Gulf of Tonkin and reached its maximum intensity of 70 kt (36 m/s) at 301800Z. Typhoon Andy made landfall as a minimal strength typhoon approximately 30 nm (56 km) north of Dong Hoi, Vietnam (WMO 48848) at 011000Z. The tropical cyclone rapidly weakened as it moved inland. The last warning, issued at 020000Z, downgraded Andy to a 25 kt (13 m/s) tropical depression as it dissipated over central Laos.

Although a tropical cyclone of this magnitude would normally be expected to cause widespread damage, none was reported. Extensive preparations made prior to the cyclone's arrival probably lessened the impact of Andy's passage.

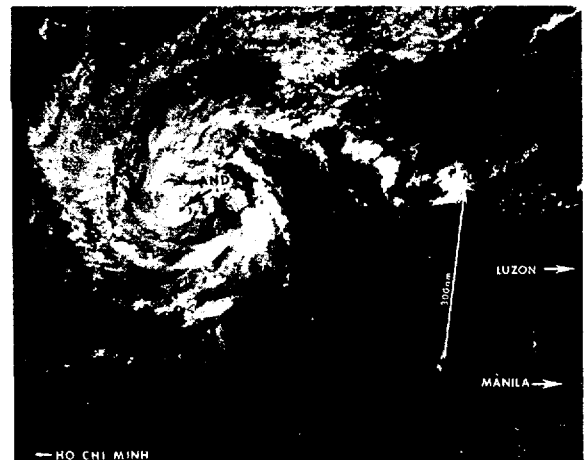


Figure 3-18-1. Typhoon Andy, with a small eye, as it entered the Gulf of Tonkin (300228Z September DMSP visual imagery).